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## ABSTRACT

This study examined the relationship among children's thoughts about friendship, their observed friendship behavior, and their attachment to their parents. The attachment of 73 children to their mothers was assessed in the Strange Situation procedure when the children were 12 months of age, and to their fathers when they were 13 months of age. At the age of 5, children were observed in play with a close or best friend during a 2-hour laboratory session. As part of the laboratory visit, the children and their friends were interviewed about each other. Results indicated connections between children's attachment classification and the conception of friendship held by the children's friends, and between conceptions of friendship and behavior in friendship. (PM)

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Associations Between Infant-Parent Attachment Security,  
Conceptions of Friendship and Behavioral  
Characteristics of Friendship in 5-Year-Olds

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### ABSTRACT

Attachment theory holds that the infant-parent relationships serves as a  
prototypic template for the way children behave in and think about subsequent  
relationships. Recent studies have discerned links between attachment security and  
behavior with friends. However, there is only little data in terms of links between  
attachment and conceptions of friendship, and the extent to which attachment history  
impacts the links between thought about friendship and observable behavior with a close  
or best friend. The goal of this study was to examine the relationship between children's  
thoughts about friendship and their observable friendship behavior, and the attachment  
correlates of this link. As part of a longitudinal study, 73 children were assessed in the  
Strange Situation with mother (12 months) and with father (13 months). At 5, each  
child was observed with his/her close or best friend in freeplay during a 2-hour  
laboratory visit. As part of the visit, the children were interviewed about their close  
friend. Results indicated that conception of friendship and attachment were correlated;  
however, associations emerged only for the friend, and were inverse in the case of infant-  
father attachment. Significant correlations were obtained between both children's  
conceptions of friendship and dyadic measures of friendship behavior. Some evidence  
emerged to suggest that part of the effect of attachment on friendship behavior may  
"flow through" children's thoughts about friendship; again, however, these analyses  
point to the role of friend selection effects.

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## INTRODUCTION

Attachment theory holds that the infant-parent relationship serves as a prototypic template for the way children behave in and think about subsequent relationships. One increasingly investigated link between relationships has been the link between the parent-child relationship and the child's relationships with peers. Based on the theoretical premises (a) that relationships are inherently dyadic, and (b) that the quality of child-parent attachment is related to the quality of the child's subsequent close relationships, recent studies have explored links between attachment security and behavior with close friends (Park & Waters, 1989; Youngblade & Belsky, 1992). Park and Waters (1989) found that pairs of preschool children securely attached to their mothers were in more positive friendships. Likewise, Youngblade and Belsky (1992) found, after controlling for more proximal parent-child relations, that 5-year-olds who were securely attached to their mothers were in friendships that evinced less dyadic negativity than those of children who were insecurely attached. However, an inverse pattern of results was obtained for infant-father attachment such that children who had been securely attached to their fathers as infants were in friendships at age 5 that were less dyadically positive than those of insecurely attached children.

According to attachment theory, child-parent attachment should not only affect children's behaviors in subsequent close relationships, but also children's mental representations of those relationships. Bowlby (1973) suggested that infants construct internal working models of their primary relationships, which are thought to be generalized, often subconscious, representations that are both cognitive and affective in nature (Bretherton, 1985; Ellicker, Eglund & Sroufe, 1992). These representations are purported to guide attitudes, expectations, and evaluations regarding the formation and maintenance of relationships beyond the parent-child dyad, including early peer relationships (Ellicker et al., 1992; Sroufe & Fleeson, 1986).

Yet, there is little information regarding associations between attachment and children's conceptions of friendship, and between children's conceptions of friendship and their actual behavior in friendship. In an earlier paper, Youngblade, Bonilla, and Belsky (1992) reported that differences between children's conceptions of friendship in general and a specific close friendship were moderated by attachment history. That is, securely attached children thought about a specific close friendship at a developmentally higher level than they thought about friendship in general; insecurely attached children made no such distinctions. One could argue that children who have sensitive, nurturing parents learn to attend to different facets of relationships, and thus build models of relationships that allow for the specifics of particular relationships above and beyond the generality of a rigid, stereotyped view of what a relationship is. While this is interesting, two additional questions arise from these findings.

The first issue has to do with how children's conceptions of friendship are related to their actual behavior in the friend dyad, and how attachment history influences these links. To the extent that attachment "flows through" children's mental representations of relationships and thereby impacts behavior in subsequent relationships, children's conceptions of friendship should mediate the link between attachment and friendship behavior.

The second issue has to do with the notion that attachment might not only be related to the child's thoughts and behavior, but might be related to the other interactant in the friendship--the friend. The work of Jacobsen and Wille (1986) suggests that attachment history is related more to the child's attractiveness as an interactive partner than to the child's own active interest in engaging peer interaction. In addition, the work of Parke and his colleagues (Parke, MacDonald, Beitel, & Bhavnagri, 1988) suggests that parents may choose or facilitate their children's friendships directly. Based on both these lines of reasoning, then, "friend selection" effects were examined in the current study. To the extent that the attractiveness of a child as an interactive partner derives, at least in part, from his/her attachment history, and to the extent that parents choose friends, or facilitate friendship interaction, it was anticipated that significant associations would emerge between the parent-child attachment relationship and the friend's thoughts about friendship.

Thus, this study seeks to build on earlier work documenting associations between infant-parent attachment and children's subsequent behavior with close friends by exploring the relationship between children's thoughts about friendship and their observable friendship behavior, and the attachment correlates of this link. In particular, we addressed the following issues:

- (1) We examined the nature of 5-year-olds' conceptions of friendship in terms of level of development of friendship conception, and children's use of category and relationship referent (i.e., dyadic or individual referent).
- (2) We examined the correlations between attachment and conceptions of friendship for both the child and friend.
- (3) We examined the links between conceptions of friendship and friendship behavior, and explored whether conceptions of friendship mediated the link between attachment and observable friendship behavior.

## METHOD

### Subjects

Subjects were 73 children (44 boys, 29 girls) from white, middle- and working-class families participating in the Pennsylvania Child and Family Development Project and their close or best friend. The data reported here were collected at 2 points in time: when the target child was 1 and 5 years old. Characteristics of the friendship pairs are listed on the overhead. We explored the dependent variables, which will be described shortly, in terms of these characteristics. Length of friendship and our measure of dyadic negativity were positively correlated. Gender effects will be described below.

### One-Year Attachment Assessment

At 12 months, each infant-mother dyad was seen in the Strange Situation; each infant-father pair was assessed at 13 months. 53 infant-mother pairs were classified as securely attached, 20 dyads were classified as insecurely attached. 47 infant-father pairs were rated as securely attached; 19 dyads were rated as insecurely attached.

### Five-Year Friendship Assessment

At five years, each child brought a close or best friend to a 2-hour laboratory play session, consisting of several episodes. The data reported today emanate from the coding of two freerplay episodes and an interview about friendship. During the visit each child was also administered the Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1981).

Freerplay observation. The first freerplay episode lasted 10 minutes, during which the children could play with whatever they wanted to in the lab. The second lasted 20 minutes, and involved placing the children together on a blanket with a set of toys and permitting them to play together.

Children's behavior was rated every 30 seconds for each episode on a set of 8 ratings assessing dyadic characteristics of close relationships; these characteristics are shown on the overhead. These 30-second ratings of each dyadic variable were summed within the 2 freerplay episodes to form episode summary scores. Because of significant across-episode correlations, these within-episode scores were summed. The 8 summary dyadic variables were then factor analyzed. Two factors, a positive factor and a negative factor, emerged. The positive factor consisted of connectedness, synchrony, positivity and proximity. The negative factor consisted of asynchrony and negativity.

These two composite variables were explored in terms of cognitive aptitude and gender. There were no significant correlations with the PPVT-R. In addition,

there were no effects for target or friend gender. However, we found that, in terms of gender composition, there was a trend for girl-girl pairs to evince the highest levels of dyadic positivity. There were no attachment by gender interactions on either of these variables. Main effects for attachment are presented below.

Friendship interview. Each child was interviewed separately about (a) his/her conceptions of friendship in general and (b) the friendship s/he has with the friend in the laboratory. Four of the 73 target children and 6 of the friends did not complete the interview. Today I am only reporting on conceptions of the actual friendship.

Each child was asked a standard series of 3 questions (see Table 1). The children's responses to the questions were coded along 3 dimensions:

- (1) All responses to the questions about the child's friendship were categorized along Selman's (1980) 4 levels of conceptual development of friendship:

0 = Friendship based on material gain  
1 = Playing and reciprocal liking  
2 = Cooperation  
3 = Shared feelings and/or interests

- (2) Each set of responses was coded using an adaptation of published categories of friendship conception (Bigelow & LaGaipa, 1975; Furman & Bierman, 1984). For the analyses reported today, this provided a variable representing the range of unique categories used by each child.

- (3) Each category that was used was further coded as to relationship referent used. "Individual Referent" was coded for statements involving the self or the friend as the referent (e.g., "I like going to his house" [self]; "She always wants to play with me" [friend]). "Dyad Referent" was coded for statements involving references to the friendship dyad (e.g., "We like each other" or "We like the same school").

To sum, this strategy resulted in a set of 8 variables describing the children's cognitive representation of their friendship: Selman level of development of friendship conception for target and friend, number of descriptive categories used for target and friend, number of dyadic referents for target and friend, and number of individual referents for target and friend.

Preliminary analyses revealed that scores on the PPVT-R were not correlated with the friendship conception variables, suggesting that individual differences in conceptions of friendship are not simply due to differences in cognitive aptitude. There were also no effects of target or child gender on these variables. In terms of gender

Negative dyadic behavior was correlated with the friend's level of development and number of dyadic referents s/he used to describe the friendship.

We next explored whether these associations varied as a function of attachment security. To do so, we endeavored to explore path analytically the idea that attachment not only affects friendship behavior directly, but that some of the effects of attachment "flow through" children's mental representations of their friendship. The path analytic model is presented in the overhead (see Figure 1). The basic idea was that attachment security would predict friendship conceptions, which would then predict dyadic positivity or negativity. "Friend selection" effects were mapped between attachment security and the friend's conceptions. Finally, direct paths from attachment to dyadic positivity or negativity were also mapped. The model was run separately for dyad positive and dyad negative, using the 4 different conception variables (i.e., level of development, number of categories, number of dyadic referents, number of individual referents); in all, 8 path models were run.

Seven of the 8 models revealed nothing above and beyond the simple correlations already presented. However, one model hinted at some interesting linkages, and will be shown for descriptive purposes. That model is presented on the overhead. Note first that the model accounted for 24% of the variance in dyad positive. Second, both the target child's and the friend's use of dyadic descriptors were significantly predictive of dyad positive. Now let's look at the role of attachment. Infant-mother attachment does not predict dyadic positivity, either directly or mediated through the target child's or friend's use of dyadic descriptors. Infant-mother attachment does impact dyad positivity indirectly, though, as it predicts the friend's use of dyadic referents, which then predicts dyad positivity. Secure children have friends who describe their friendship dyadically, and evince more dyadic positivity than insecure children. Thus, at least some of the effect of infant-mother attachment on friendship "flows through" children's mental representations; however, it is through the friend.

Infant-father attachment paints a different picture. There is a direct, albeit inverse, direct association between infant-father attachment and dyad positive, such that secure children are in friend dyads that evince less positivity than those of insecurely attached children. They also have friends who use fewer dyadic descriptors of friendship than insecurely attached children. Again, some of the influence of attachment is via "friend selection" effects. Unlike with infant-mother attachment, however, infants securely attached to their father seem to attract friends who think about the friendship less dyadically and with whom they exhibit less dyadic positivity than insecurely attached children.

composition of the dyad, however, target children in mixed gender pairs evinced higher levels of friendship development than children in single gender pairs. Target children also used more categories to describe their friendship, and used more dyadic referents in terms of their friendship. Friends in mixed gender pairs used the most individual references (see Table 2). There were no gender by attachment interactions on any of these variables. Main effects of attachment are reported below.

## RESULTS

### Description of Friendship Conceptions

Table 3 presents the intercorrelation of the friendship conception variables. Target children and friends who talked about their friendship at a higher level of development used more categories and more dyadic referents to describe the friendship. For friends, the number of individual referents were positively correlated with the level of development of friendship conception. For target children, the number of individual referents were negatively correlated with dyadic referents. Finally, note the positive correlation between target children's and friends' level of development of friendship conception: target children and their friends generally characterized their friendship at similar levels, even though there was no association between the number of categories or referents that they used to describe the friendship.

### Links Between Attachment Security and Conceptions of Friendship

Table 4 presents the correlations between conceptions of friendship and infant-mother and infant-father attachment security. There were no significant associations between infant-parent attachment security and conceptions of friendship for target children. However, for friends, infant-mother attachment was correlated with the number of dyadic referents; that is, friends of securely attached children used more dyadic referents to talk about their friendship. The opposite was true for infant-father attachment. Here, friends of securely attached children used fewer dyadic referents to describe their friendship.

### Links Between Behavior and Conceptions of Friendship

The next set of analyses focused on the links between conceptions of friendship and observable behavior in the friendship dyad. The two composite behavioral variables (dyad positive, dyad negative) were correlated with the friendship conception variables. As can be seen in Table 5, positive dyadic behavior was correlated with the number of dyadic referents for both target children and their friends. Positive dyadic behavior was inversely correlated with the number of individual referents used by the target child.



## DISCUSSION

The goal of this study was to examine the links between attachment, conceptions of friendship and dyadic behavior in friendship. In general, there were stronger associations between attachment and the friend's conceptions of friendship, results which parallel the "friend selection" findings of Jacobson and Wille (1986). There were significant associations between conceptions of friendship and behavior in friendship, such that children who described their friendship dyadically were in more positive dyads. In addition, friends who used dyadic terms and had a higher level of development of friendship conception were also in dyads that displayed more dyadic negativity. Thus, it's possible that children who are able to entertain the notion that friendship is "give and take", are also able to tolerate positivity and negativity when interacting with their friend.

There was some evidence to suggest that some of the effect of attachment on friendship behavior is mediated through the friend's conceptions of the friendship. However, the nature of the mediation differed for infant-mother and infant-father security. In particular, as we have found with other analyses with this data set, infant-father attachment is inversely related to measures of friendship.

While this study adds to the literature by suggesting ways in which attachment affects friendship, it also raises questions about these connections. Perhaps if we had had attachment data for the friend the results would have been clearer. Data regarding children's thoughts about their attachment relationship with their parents would also illuminate linkages. In addition, the interview was relatively brief and the children were only 5 years old. Finally, although the path model mapped the paths directionally, it should be remembered that these are basically correlational data, and especially in terms of the links between friendship conceptions and behavior, it is inappropriate to make causal inferences. Nevertheless, despite these limitations, this study found connections between attachment and children's conceptions of friendship, and children's behavior in friendship.

## REFERENCES

- Bigelow, B.J., & LaGaipa, J.J. (1975). Children's written descriptions of friendships: A multidimensional analysis. Developmental Psychology, 11, 857-858.
- Dunn & Dunn (1981). Peabody Picture Vocabulary Test-Revised.
- Furman, W., & Bierman, K. (1984). Children's conceptions of friendship: A multimethod of developmental change. Developmental Psychology, 20, 925-931.
- Hartup, W.W. (1983). Peer relations. In E.M. Hetherington (Ed.), Handbook of Child Psychology, Vol. 4 (4th ed.). New York: Wiley.
- Park, K.A., & Waters, E. (1989). Security of attachment and preschool friendships. Child Development, 60, 1076-1081.
- Selman, R.L. (1980). The growth of interpersonal understanding: Developmental and clinical analysis. New York: Academic Press.
- Youngblade, L.M., & Belsky, J. (1992). Parent-child antecedents of five-year-olds' close friendships: A longitudinal analysis. Developmental Psychology, 28(4), 700-713.

TABLE 1  
Friendship Interview Questions

General Conceptions

- (1) What's a friend? Why are children friends with each other?
- (2) Why is it that sometimes friends get along well together and have fun together?
- (3) Why is it that sometimes friends don't get along well together and don't have fun together?

Specific Conceptions

- (1) Why are you and \_\_\_\_\_ friends?
- (2) What's something that you especially like about being friends with \_\_\_\_\_?
- (3) What's something that you especially don't like about being friends with \_\_\_\_\_?

Table 2

ANOVA: Friendship Conception and Behavioral Observation

Variables by Gender Group

	Boy/Boy (n=35)	Girl/ Girl (n=25)	Mixed (n=13)	F (2,51)
TARGET CONCEPTION				
Level of Development <sup>a)</sup>	--	--	--	--
Number Categories	2.69	2.32	3.62	3.95*
Number Dyadic References	.91	.52	1.46	3.27*
Number Individual Refs.	1.86	1.84	2.38	1.06
FRIEND CONCEPTION				
Level of Development <sup>b)</sup>	--	--	--	--
Number Categories	2.49	3.04	2.85	.93
Number Dyadic References	.94	1.08	.54	.98
Number Individual Refs.	1.69	2.08	2.69	3.19*
DYADIC OBSERVATION				
Dyad Positive	397.35	428.89	381.01	2.93#
Dyad Negative	44.34	37.32	43.56	.89

a)  $\chi^2(6)=15.54$ ,  $p<.05$ . Mixed gender pairs have highest level of development scores.

b)  $\chi^2(6)=2.23$ , n.s.

Note. #  $p < .10$  \*  $p < .05$  \*\*  $p < .01$

Intercorrelation of Conception of Friendship Variables

Table 3

	1	2	3	4	5	6	7	8
TARGET CONCEPTION								
1. Level of Development <sup>1</sup>	--							
2. Number Categories	.38***	--						
3. Number Dyadic Refs.	.42***	.58***	--					
4. Number Individual Refs.	.06	.66***	-.19#	--				
FRIEND CONCEPTION								
5. Level of Development <sup>2</sup>	.25*	.01	.08	.01	--			
6. Number Categories	.13	.04	-.05	.15	.50***	--		
7. Number Dyadic Refs.	.04	.01	-.13	.22#	.44**	.60***	--	
8. Number Individual Refs.	.12	.08	.04	.05	.28*	.72***	-.06	--
a) Spearman rank order correlation. All other correlations are Pearson product moment correlations.								
Note. # p < .10 * p < .05 ** p < .01								

Table 4

Correlations of Friendship Conception and Observation  
Variables with Attachment Security

	Infant-Mother Attachment	Infant-Father Attachment
TARGET CONCEPTION		
Level of Development <sup>1</sup>	-.02	.08
Number Categories	.03	.14
Number Dyadic References	.07	.10
Number Individual Refs.	-.03	.07
FRIEND CONCEPTION		
Level of Development <sup>1</sup>	.07	-.04
Number Categories	.11	-.14
Number Dyadic References	.19#	-.24*
Number Individual Refs.	.05	.04
DYADIC OBSERVATION		
Dyad Positive	-.08	-.31**
Dyad Negative	-.18#	-.09

1. Spearman rank correlation. All other correlations are Pearson product moment correlations.

Note. # p < .10  
\* p < .05  
\*\* p < .01



Table 5  
Correlation of Conception of Friendship Variables with  
Behavioral Observation Variables

	Dyad Pos.	Dyad Neg.
<b>TARGET CONCEPTION</b>		
Level of Development <sup>1</sup>	-.02	.11
Number Categories	-.07	.11
Number Dyadic Refs.	.19#	.06
Number Individual Refs.	-.26*	.14
<b>FRIEND CONCEPTION</b>		
Level of Development <sup>1</sup>	.11	.28*
Number Categories	.20#	.10
Number Dyadic Refs.	.24*	.22#
Number Individual Refs.	-.01	.00

1. Spearman rank correlation. All other correlations are Pearson product moment correlations.

Note. #  $p < .10$   
\*  $p < .05$

FIGURE 1

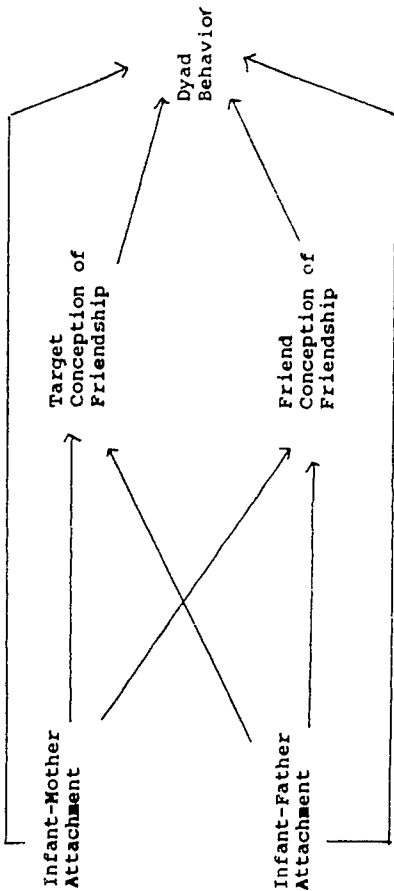
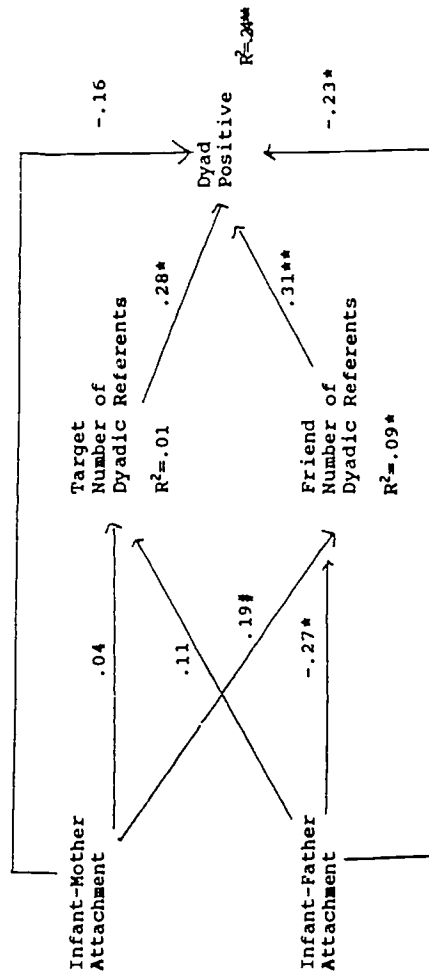


FIGURE 2



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